

REMARKS

Applicant hereby traverses the outstanding rejections and requests reconsideration and withdrawal in view of the remarks contained herein. Claims 1, 5, 9, 13, 16 and 20 have been amended. Claims 1-20 are pending in this application.

Rejection under 35 U.S.C. § 103

Claims 1-20 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,026,505 to Hedberg et al (hereinafter "Hedberg") in view of U.S. Patent No. 6,137,157 to Proebsting (hereinafter "Proebsting").

To establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art cited must teach or suggest all the claim limitations. See M.P.E.P. § 2143. Without conceding the first or second criteria, Applicant asserts that the rejection does not satisfy the third criteria.

Claims 1 and 9, as amended, require bit line multiplexers to shift in a replacement column group of memory cells into said array. At least this limitation is not shown in either Hedberg, or Proebstin. Hedberg describes storing the column addresses of columns with faulty cells in registers which allow the faulty columns to be masked and a new column mapped in. See, Abstract and column 11, lines 27-57. Proebsting describes using programmable fuse boxes which can be selectively blown to select replacement columns for faulty columns. See, Abstract. As neither Hedberg nor Proebsting describe bit line multiplexers to shift in a replacement column group of memory cells into said array, the § 103(a) rejection of record does not teach or suggest all the claim limitations of claims 1 and 9. Applicant, therefore, respectfully asserts that claims 1 and 9 are allowable, for at least the reasons set forth above, over the 35 U.S.C. §103 rejection.

Claims 1-8 and 10-15 each require, through their dependencies from claims 1 and 9, respectfully, using bit line multiplexers to shift in a replacement column group of memory cells into said array. For the reasons set forth with respect to claims 1 and 9, respectfully,

neither Hedberg nor Proebsting describe this limitation. Applicant, therefore, respectfully asserts that claims 1-8 and 10-15 are allowable, for at least the reasons set forth, over the 35 U.S.C. §103 rejection.

Claim 16, as amended, requires activating an alternate word line to shift in a replacement row of memory cells into said array. Neither Hedberg, nor Proebsting describe at least this limitation. Hedberg describes storing the row addresses of rows with faulty cells in registers which allow the faulty rows to be masked and a new row mapped in. See, Abstract and column 9, lines 45-64. Proebsting does not describe replacing rows, but uses programmable fuse boxes which can be selectively blown to select replacement columns for faulty columns. See, Abstract. As neither Hedberg nor Proebsting describe activating an alternate word line to shift in a replacement row of memory cells into said array, the § 103(a) rejection of record does not teach or suggest all the claim limitations of claim 16. Applicant, therefore, respectfully asserts that claim 16 is allowable, for at least the reasons set forth above, over the 35 U.S.C. §103 rejection.

Claims 17-20 each require, through their dependencies from claim 16, activating an alternate word line to shift in a replacement row of memory cells into said array. For the reasons set forth with respect to claim 16, respectfully, neither Hedberg nor Proebsting describe this limitation. Applicant, therefore, respectfully asserts that claims 17-20 are allowable, for at least the reasons set forth, over the 35 U.S.C. §103 rejection.

Conclusion

In view of the above, each of the presently pending claims in this application is believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to pass this application to issue.

In view of the above amendment, applicant believes the pending application is in condition for allowance.

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